

Appl. No. 10/039,929
Amtd. Dated August 9, 2005
Reply to Office action of May 16, 2005
Attorney Docket No. P13047US1
EUS/J/P/05-3181

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 -6. Canceled

7. (New) An arrangement in a High speed Digital Subscriber Line (HDSL) communication system for fault isolation, comprising:

a line terminal, for transmitting a signal and for monitoring an embedded overhead channel between the line terminal and a network terminal that receives the signal;

the overhead channel for managing fault isolation between the line terminal and the network terminal; and

a passive repeater, coupled to the overhead channel between the line terminal and the network terminal, for receiving the signal from the line terminal and forwarding the signal to the network.

8. (New) The arrangement of claim 7, wherein the passive repeater comprises a flip-flop circuit that changes state when a deactivation/activation command from the line terminal is detected.

9. (New) The arrangement of claim 8, wherein the flip-flop in a high state is interpreted as a loop and the flip-flop in a low state is interpreted as transparency.

10. (New) The arrangement of claim 8, wherein an origin bit in the embedded overhead channel is set for upstream direction or downstream direction and an upstream origin bit detected at the line terminal having a different value from the set value indicates a loop.

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11. (New) The arrangement of claim 9, wherein the value of the origin bit of the upstream direction is one and the value of the origin bit of the downstream direction is zero.

12. (New) The arrangement of claim 7, wherein the transmitted signal is passed through the passive repeater without terminating the signal and without regenerating the signal for transmission to the network terminal.

13. (New) A method of fault isolation on High speed Digital Subscriber Line (HDSL) communication system, comprising the steps of:

monitoring an embedded operational channel (EOC) connected between a line terminal and a network terminal;

utilizing a passive repeater connected between the line terminal and the network terminal, wherein the passive repeater amplifies a signal from the line terminal and forwards the amplified signal to the network terminal; and

detecting an origin bit in the EOC at the line terminal, wherein a value of the origin bit indicates a loop in the passive repeater.

14. (New) The method of claim 13, further comprising
passing the signal through the passive repeater without terminating the signal and without regenerating the signal.

15. (New) The method of claim 13, further comprising:
responsive to an deactivation/activation command from the line terminal, changing the state of a flip-flop that is coupled with the passive repeater.

16. (New) The method of claim 15, further comprising interpreting the state of the flip-flop, wherein a high state is interpreted as a loop and a low state is interpreted as transparency.

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17. (New) The method of claim 13, wherein the value of the origin bit of the upstream direction is one and the value of the origin bit of the downstream direction is zero.